

## ABSTRACT

There is provided a correlator which detects correlation for data having a certain length, wherein the correlator is comprised of a plurality of sub-correlators, each of the sub-correlators has a length equal to a divisor of the  
5 certain length, each of the sub-correlators has such a length that a product of all length of the sub-correlators is equal to the certain length, and a correlation value output from one of the sub-correlators is input into a sub-correlator located immediately downstream of the one of the sub-correlators.